

10/788482

Barristers & Solicitors  
Patent & Trade-mark Agents

McCarthyTétrault



April 11, 2007  
VIA COURIER

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United States Patent and Trademark Office  
Customer Service Window  
Office of Patent Publication  
Attention: Certificates of Correction Branch  
Randolph Building  
401 Dulany Street  
Alexandria, Virginia 22314  
U.S.A.

Dear Commissioner for Patents:

**RE: U.S. Patent No. 7,173,633 - Request for Certificate of Correction**  
**Inventors: Mark H. A. Tigges**  
**For: Method and System for Inversion of Detail-In-Context Presentations**  
**Docket No.: 198821-368890**

Please find attached the following documents for filing with respect to the above patent:

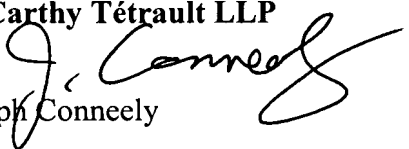
1. Transmittal Form (1 sheet);
2. Fee Transmittal Form (1 sheet);
3. Request for Certificate of Correction (15 sheets); and,
4. Certificate of Correction Form (1 sheet).

The Commissioner is hereby authorized to charge all necessary fees and to credit Deposit Account No. 150633 in the name of McCarthy Tétrault LLP (Customer No. 27,155).

Please date stamp and return to us the enclosed "Return Receipt Postcard".

Thank you very much for your assistance in this matter.

Yours very truly,  
McCarthy Tétrault LLP

Per:   
Joseph Conneely  
JC/tf  
/Enclosure

**Certificate**

APR 13 2007

**of Correction**

TDO-RED #8364828 v. 1

Vancouver, Calgary, London, Toronto, Ottawa, Montréal, Québec, New York and London, England

APR 13 2007



PTO/SB/17 (02-07)

Approved for use through 02/28/2007. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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Effective on 12/08/2004.

Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

# FEE TRANSMITTAL

## For FY 2007

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 100.00

**Complete if Known**

Application Number	10/788,482
Filing Date	MARCH 1, 2004
First Named Inventor	MARK H. A. TIGGES
Examiner Name	JAVID A. AMINI
Art Unit	2628
Attorney Docket No.	198821-368890

**METHOD OF PAYMENT** (check all that apply)☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): \_\_\_\_\_☒ Deposit Account Deposit Account Number: 150633 Deposit Account Name: MCCARTHY TETRAULT LLP

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

**FEE CALCULATION****1. BASIC FILING, SEARCH, AND EXAMINATION FEES**

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

**2. EXCESS CLAIM FEES****Fee Description**

	Fee (\$)	Small Entity Fee (\$)
Each claim over 20 (including Reissues)	50	25
Each independent claim over 3 (including Reissues)	200	100
Multiple dependent claims	360	180

Total Claims	Extra Claims	Fee (\$)	Fee Paid (\$)
- 20 or HP =	x	=	

HP = highest number of total claims paid for, if greater than 20.

Indep. Claims	Extra Claims	Fee (\$)	Fee Paid (\$)
- 3 or HP =	x	=	

HP = highest number of independent claims paid for, if greater than 3.

**3. APPLICATION SIZE FEE**

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
- 100 =	/ 50 =	(round up to a whole number) x	=	

**4. OTHER FEE(S)**

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): REQUEST FOR CERTIFICATE OF CORRECTION

Fees Paid (\$)

100.00

**SUBMITTED BY**

Signature

Registration No.  
(Attorney/Agent) 54,883

Telephone 416-601-8179

Name (Print/Type) JOSEPH CONNEELY (CUST. NO. 27,155)Date APRIL 11, 2007

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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APR 13 2007



**IN THE UNITED STATES PATENT & TRADEMARK OFFICE**

Patent No. : 7,173,633  
Issued : February 6, 2007  
Title : METHOD AND SYSTEM FOR INVERSION OF  
DETAIL-IN-CONTEXT PRESENTATIONS  
Applicant : Mark H. A. Tigges  
Application No. : 10/788,482  
Filed : March 1, 2004  
Confirmation No. : 9571  
Art Unit : 2628  
Examiner : Javid A. Amini  
Docket No. : 198821-368890  
Customer No. : 27,155

Commissioner of Patents  
Office of Patent Publication  
Attention: Certificates of Correction Branch  
P.O. Box 1450  
Alexandria, V.A. 22313-1450

**REQUEST FOR CERTIFICATE OF CORRECTION**

Sir:

The Applicant respectfully requests the issue of a Certificate of Correction for the above noted patent.

The errors for which correction is requested were made by the Patent Office (i.e., items 1-6 and 8-9 below) and by the Applicant (i.e., item 7 below).

04/12/2007 YPOLITE1 00000077-150633 10700482  
01 FC:1811 100.00 DA

04/12/2007 YPOLITE1 00000078 150633 7173633  
01 FC:1811 100.00 DA

APR 13 2007

The requested corrections are as follows:

1. Claim 1, column 7, line 25: Delete the comma “ , ” after the expression “ $P_i$ ”.
2. Claim 1, column 7, line 28: Delete the comma “ , ” after the expression “ $P_i$ ”.
3. Claim 9, column 7, line 63: Delete the comma “ , ” after the second occurrence of the expression “ $P_i^P$ ”.
4. Claim 16, column 8, line 41: Delete the comma “ , ” after the expression “ $P_i$ ”.
5. Claim 20, column 9, line 20: Replace the expression “  $| P_{i1}^{D-X_1} |$  ” with the expression “  $| P_{i1}^D - X_1 |$  ”.
6. Claim 20, column 9, line 39: Replace the word “maanitude” with the word --magnitude--.
7. Claim 21, column 9, line 42: Replace the word “disported” with the word --distorted--.
8. Claim 22, column 9, line 55: Replace the word “detennining” with the word --determining--.
9. Claim 22, column 9, line 60: Delete the comma “ , ” after the expression “ $P_i$ ”.

The above corrections are fully supported by the Applicant’s “Amendment /Reply” filed July 10, 2007. A copy of this document is enclosed for reference.

Please find enclosed a completed Form PTO/SB/44 (“Certificate of Correction”) indicating the above corrections. Also enclosed in a completed Form PTO/SB/17 (“Fee Transmittal”) for payment of the required fees.

The Commissioner is hereby authorized to charge all necessary fees and to credit Deposit Account No. 150633 in the name of McCarthy Tétrault LLP (Customer No. 27,155).

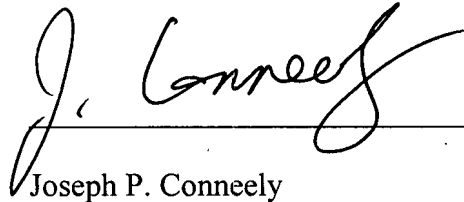
No new matter has been entered by the above corrections.

APR 13 2007

Respectfully submitted,  
McCarthy Tétrault LLP

Date: April 11, 2007

By

A handwritten signature in black ink, appearing to read "J. Conneely", written over a horizontal line.

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Enclosures

APR 13 2007

# UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page 1 of 1

PATENT NO. : 7,173,633

APPLICATION NO.: 10/788,482

ISSUE DATE : February 6, 2007

INVENTOR(S) : Mark H. A. Tigges et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

1. Claim 1, column 7, line 25: Delete the comma “ , ” after the expression “ $P_i$ ”.
2. Claim 1, column 7, line 28: Delete the comma “ , ” after the expression “ $P_i$ ”.
3. Claim 9, column 7, line 63: Delete the comma “ , ” after the second occurrence of the expression “ $P_i^P$ ”.
4. Claim 16, column 8, line 41: Delete the comma “ , ” after the expression “ $P_i$ ”.
5. Claim 20, column 9, line 20: Replace the expression “  $| P_{il}^{D-X_1} |$  ” with the expression “  $| P_{il}^D - X_1 |$  ”.
6. Claim 20, column 9, line 39: Replace the word “maanitude” with the word --magnitude--.
7. Claim 21, column 9, line 42: Replace the word “disorted” with the word --distorted--.
8. Claim 22, column 9, line 55: Replace the word “detennining” with the word --determining--.
9. Claim 22, column 9, line 60: Delete the comma “ , ” after the expression “ $P_i$ ”.

MAILING ADDRESS OF SENDER (Please do not use customer number below):

MCCARTHY TETRAULT LLP, BOX 48, SUITE 4700, 66 WELLINGTON STREET WEST, TORONTO,  
ONTARIO, CANADA M5K 1E6

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APR 13 2007



PTO/SB/21 (09-06)  
Approved for use through 03/31/2007. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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## TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

18

Application Number	10/788,482
Filing Date	MARCH 1, 2004
First Named Inventor	MARK H. A. TIGGES
Art Unit	2628
Examiner Name	JAVID A. AMINI
Attorney Docket Number	198821-368890

### ENCLOSURES (Check all that apply)

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Fee Transmittal Form<br><input type="checkbox"/> Fee Attached<br><input type="checkbox"/> Amendment/Reply<br><input type="checkbox"/> After Final<br><input type="checkbox"/> Affidavits/declaration(s)<br><input type="checkbox"/> Extension of Time Request<br><input type="checkbox"/> Express Abandonment Request<br><input type="checkbox"/> Information Disclosure Statement<br><br><input type="checkbox"/> Certified Copy of Priority Document(s)<br><input type="checkbox"/> Reply to Missing Parts/<br>Incomplete Application<br><input type="checkbox"/> Reply to Missing Parts<br>under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s)<br><input type="checkbox"/> Licensing-related Papers<br><br><input type="checkbox"/> Petition<br><input type="checkbox"/> Petition to Convert to a<br>Provisional Application<br><input type="checkbox"/> Power of Attorney, Revocation<br>Change of Correspondence Address<br><br><input type="checkbox"/> Terminal Disclaimer<br><br><input type="checkbox"/> Request for Refund<br><br><input type="checkbox"/> CD, Number of CD(s) _____<br><input type="checkbox"/> Landscape Table on CD | <input type="checkbox"/> After Allowance Communication to TC<br><br><input type="checkbox"/> Appeal Communication to Board<br>of Appeals and Interferences<br><br><input type="checkbox"/> Appeal Communication to TC<br>(Appeal Notice, Brief, Reply Brief)<br><br><input type="checkbox"/> Proprietary Information<br><br><input type="checkbox"/> Status Letter<br><input checked="" type="checkbox"/> Other Enclosure(s) (please identify<br>below):<br><br>REQUEST FOR CERTIFICATE OF<br>CORRECTION |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Remarks

### SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	MCCARTHY TETRAULT LLP (CUST. NO. 27,155)		
Signature			
Printed name	JOSEPH CONNEELY		
Date	APRIL 11, 2007	Reg. No.	54,883

### CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

Signature

Typed or printed name

Date

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APR 13 2007



**IN THE UNITED STATES PATENT & TRADEMARK OFFICE**

Application. No. : 10/788,482  
Applicant : Mark H. A. Tigges  
Filed : March 1, 2004  
Title : A METHOD AND SYSTEM FOR INVERSION OF  
DETAIL-IN-CONTEXT PRESENTATIONS  
Confirmation No. : 9571  
Art Unit : 2628  
Examiner : Javid A. Amini  
Docket No. : 198821-368890  
Customer No. : 27,155

Commissioner of Patents  
P.O. Box 1450  
Alexandria, V.A. 22313-1450

**AMENDMENT/REPLY**

Sir:

This is in response to the Examiner's Office Action mailed April 12, 2006 (which included an Interview Summary completed by the Examiner).

Please amend the above-identified application as follows:

**Amendments to the Claims** are reflected in the listing of claims which begins on page 2 of this paper; and,

**Remarks/Arguments** begin on page 10 of this paper.

APR 13 2007



**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

1-21. (Cancelled)

22. (Currently Amended) In a data processing system that executes a program of instructions, a method for inverting a point X on a distorted surface in a detail-in-context presentation for display on a display screen, comprising the steps of:

- (a) locating a first approximation point  $P_i$  for an inversion of the point X, wherein the point  $P_i$  is on an undistorted surface; and,
- (b) obtaining a point  $P_i^D$  by displacing the point  $P_i$  onto the distorted surface by applying a distortion function D; calculating a magnitude of the difference  $|P_i^D - X|$  between the point X and the point  $P_i^D$ ; ~~and,~~ determining whether the point  $P_i$  is acceptable for the inversion of the point X by comparing the magnitude of the difference to a tolerance  $\delta$  ; and, displaying the point  $P_i$  on the display screen if the point  $P_i$  is acceptable for the inversion of the point X .

23. (Previously Presented) The method of claim 22 and further comprising the steps of :

- (c) locating a next approximation point  $P_{i+1}$  for the inversion of the point X if the approximation point  $P_i$  is not acceptable for the inversion of the point X; and,
- (d) repeating steps (b) and (c) until the approximation point is acceptable for the inversion of the point X.

24. (Previously Presented) The method of claim 23 and further comprising the step of selecting the tolerance  $\delta$ .

25. (Previously Presented) The method of claim 24 wherein the tolerance  $\delta$  is a fraction of a width of a pixel for a computer display surface.

APR 13 2007

26. (Previously Presented) The method of claim 25 wherein the fraction includes one-half.
27. (Previously Presented) The method of claim 22 wherein the undistorted surface is included in the detail-in-context presentation.
28. (Previously Presented) The method of claim 23 and further comprising the step of constructing a line RVP-X from a point RVP above the undistorted surface, through the point X, and through the undistorted surface to locate the first approximation point  $P_i$  at a point of intersection of the line RVP-X and the undistorted surface.
29. (Previously Presented) The method of claim 28 wherein the point RVP is a reference viewpoint for the detail-in-context presentation.
30. (Previously Presented) The method of claim 29 and further comprising the steps of:  
projecting the point  $P_i^D$  onto the line RVP-X to locate a point  $P_i^P$ , wherein the point  $P_i^P$  is a closest point to the point  $P_i^D$  on the line RVP-X; and,  
projecting the point  $P_i^P$  onto the undistorted surface in a direction opposite to that of a displacement due to distortion to locate the next approximation point  $P_{i+1}$  for the inversion of the point X, wherein the displacement due to distortion is given by a line  $F_0 - F$  constructed through the undistorted surface and a focus F of the distorted surface, and wherein the point  $P_{i+1}$  is located on the undistorted surface at a point of intersection of the undistorted surface and a line constructed parallel to the line  $F_0 - F$  and passing through the point  $P_i^P$ .
31. (Previously Presented) The method of claim 23 and further comprising the step of bisecting the point  $P_i$  to counter divergence in successive approximations of the point  $P_i$  due to folds or discontinuities in the distorted surface.
32. (Previously Presented) The method of claim 22 wherein the undistorted surface is a plane.

33. (Previously Presented) The method of claim 22 wherein the distorted surface is defined by the distortion function D.

34. (Previously Presented) The method of claim 33 wherein the distortion function D is an n-dimensional function, wherein n is an integer greater than zero.

35. (Previously Presented) The method of claim 34 wherein the distortion function D is a three-dimensional function.

36. (Previously Presented) The method of claim 33 wherein the distortion function D is a lens function.

37. (Currently Amended) A system for inverting a point X on a distorted surface in a detail-in-context presentation, the system having memory, a display, and an input device, the system comprising:

a processor coupled to the memory, display, and input device and adapted for:

(a) locating a first approximation point  $P_i$  for an inversion of the point X, wherein the point  $P_i$  is on an undistorted surface; and,

(b) obtaining a point  $P_i^D$  by displacing the point  $P_i$  onto the distorted surface by applying a distortion function D; calculating a magnitude of the difference  $|P_i^D - X|$  between the point X and the point  $P_i^D$ ; ~~and,~~ determining whether the point  $P_i$  is acceptable for the inversion of the point X by comparing the magnitude of the difference to a tolerance  $\delta$ ; and, displaying the point  $P_i$  on the display if the point  $P_i$  is acceptable for the inversion of the point X.

38. (Previously Presented) The system of claim 37 wherein said processor is further adapted for:

(c) locating a next approximation point  $P_{i+1}$  for the inversion of the point X if the approximation point  $P_i$  is not acceptable for the inversion of the point X; and,

(d) repeating (b) and (c) until the approximation point is acceptable for the inversion of the point X.

39. (Currently Amended) A computer program product having a computer readable medium tangibly embodying computer executable code for directing a data processing system to invert a point X on a distorted surface in a detail-in-context presentation for display on a display screen , the computer program product comprising:

code for (a) locating a first approximation point  $P_i$  for an inversion of the point X, wherein the point  $P_i$  is on an undistorted surface; and,

code for (b) obtaining a point  $P_i^D$  by displacing the point  $P_i$  onto the distorted surface by applying a distortion function D; calculating a magnitude of the difference  $|P_i^D - X|$  between the point X and the point  $P_i^D$  ; ~~and,~~ determining whether the point  $P_i$  is acceptable for the inversion of the point X by comparing the magnitude of the difference to a tolerance  $\delta$  ; and, displaying the point  $P_i$  on the display screen if the point  $P_i$  is acceptable for the inversion of the point X .

40. (Previously Presented) The computer program product of claim 39 and further comprising:

code for (c) locating a next approximation point  $P_{i+1}$  for the inversion of the point X if the approximation point  $P_i$  is not acceptable for the inversion of the point X; and,

code for (d) repeating (b) and (c) until the approximation point is acceptable for the inversion of the point X.

41-42. (Cancelled)

43. (Currently Amended) In a data processing system that executes a program of instructions, a method for determining a distance on an undistorted surface between a first point  $X_1$  and a second point  $X_2$  on a distorted surface in a detail-in-context presentation for display on a display screen, comprising:

inverting the point  $X_1$  by:

locating a first approximation point  $P_{i1}$  for an inversion of the point  $X_1$ , wherein the point  $P_{i1}$  is on the undistorted surface; and,

obtaining a point  $P_{i1}^D$  by displacing the point  $P_{i1}$  onto the distorted surface by applying a distortion function  $D$ ; calculating a magnitude of the difference  $|P_{i1}^D - X_1|$  between the point  $X_1$  and the point  $P_{i1}^D$ ; and, determining whether the point  $P_{i1}$  is acceptable for the inversion of the point  $X_1$  by comparing the magnitude of the difference  $|P_{i1}^D - X_1|$  to a tolerance  $\delta$ ;

inverting the point  $X_2$  by:

locating a first approximation point  $P_{i2}$  for an inversion of the point  $X_2$ , wherein the point  $P_{i2}$  is on the undistorted surface; and,

obtaining a point  $P_{i2}^D$  by displacing the point  $P_{i2}$  onto the distorted surface by applying a distortion function  $D$ ; calculating a magnitude of the difference  $|P_{i2}^D - X_2|$  between the point  $X_2$  and the point  $P_{i2}^D$ ; and, determining whether the point  $P_{i2}$  is acceptable for the inversion of the point  $X_2$  by comparing the magnitude of the difference  $|P_{i2}^D - X_2|$  to the tolerance  $\delta$ ; ~~and,~~

calculating a magnitude of the difference  $|P_{i1} - P_{i2}|$  between the approximation points  $P_{i1}$  and  $P_{i2}$ ; and,

displaying the magnitude of the difference  $|P_{i1} - P_{i2}|$  on the display screen .

44. (Previously Presented) The method of claim 43 wherein the first point  $X_1$  is on a first distorted surface defined by a first distortion function  $D_1$  and the second point  $X_2$  is on a second distorted surface defined by a second distortion function  $D_2$ .

45. (Currently Amended) In a data processing system that executes a program of instructions, a method for inverting a point  $X$  on a distorted surface in a detail-in-context presentation for display on a display screen, comprising the steps of:

- (a) locating a first approximation point  $P_i$  for an inversion of the point  $X$ , wherein the point  $P_i$  is on an undistorted surface;
- (b) obtaining a point  $P_i^D$  by displacing the point  $P_i$  onto the distorted surface by applying a distortion function  $D$ ; calculating a magnitude of the difference  $|P_i^D - X|$  between the point  $X$  and the point  $P_i^D$ ; and, determining whether the point  $P_i$  is acceptable for the inversion of the point  $X$  by comparing the magnitude of the difference to a tolerance  $\delta$ ;
- (c) locating a next approximation point  $P_{i+1}$  for the inversion of the point  $X$  if the approximation point  $P_i$  is not acceptable for the inversion of the point  $X$  by: constructing a line RVP- $X$  from a point RVP above the undistorted surface, through the point  $X$ , and through the undistorted surface to locate the first approximation point  $P_i$  at a point of intersection of the line RVP- $X$  and the undistorted surface, wherein the point RVP is a reference viewpoint for the detail-in-context presentation; projecting the point  $P_i^D$  onto the line RVP- $X$  to locate a point  $P_i^P$ , wherein the point  $P_i^P$  is a closest point to the point  $P_i^D$  on the line RVP- $X$ ; and, projecting the point  $P_i^P$  onto the undistorted surface in a direction opposite to that of a displacement due to distortion to locate the next approximation point  $P_{i+1}$  for the inversion of the point  $X$ , wherein the displacement due to distortion is given by a line  $F_0 - F$  constructed through the undistorted surface and a focus  $F$  of the distorted surface, and wherein the point  $P_{i+1}$  is located on the undistorted surface at a point of intersection of the undistorted surface and a line constructed parallel to the line  $F_0 - F$  and passing through the point  $P_i^P$  ~~and~~;
- (d) repeating steps (b) and (c) until the approximation point is acceptable for the inversion of the point  $X$  ~~and~~;
- (e) displaying the approximation point on the display screen .

46. (Currently Amended) A computer program product having a computer readable medium tangibly embodying computer executable code for directing a data processing system to invert a point X on a distorted surface in a detail-in-context presentation for display on a display screen , the computer program product comprising:

code for (a) locating a first approximation point  $P_i$  for an inversion of the point X, wherein the point  $P_i$  is on an undistorted surface;

code for (b) obtaining a point  $P_i^D$  by displacing the point  $P_i$  onto the distorted surface by applying a distortion function D; calculating a magnitude of the difference  $|P_i^D - X|$  between the point X and the point  $P_i^D$  ; and, determining whether the point  $P_i$  is acceptable for the inversion of the point X by comparing the magnitude of the difference to a tolerance  $\delta$ ;

code for (c) locating a next approximation point  $P_{i+1}$  for the inversion of the point X if the approximation point  $P_i$  is not acceptable for the inversion of the point X; ~~and~~,

code for (d) repeating (b) and (c) until the approximation point is acceptable for the inversion of the point X ; and,

code for (e) displaying the approximation point on the display screen .

47. (Currently Amended) In a data processing system that executes a program of instructions, a method for inverting a point X on a distorted surface in a detail-in-context presentation for display on a display screen, comprising the steps of:

(a) locating a first approximation point  $P_i$  for an inversion of the point X, wherein the point  $P_i$  is on an undistorted surface;

(b) obtaining a point  $P_i^D$  by displacing the point  $P_i$  onto the distorted surface by applying a distortion function D; calculating a magnitude of the difference  $|P_i^D - X|$  between the point X and the point  $P_i^D$  ; and, determining whether the point  $P_i$  is acceptable for the inversion of the point X by comparing the magnitude of the difference to a tolerance  $\delta$ ;

(c) locating a next approximation point  $P_{i+1}$  for the inversion of the point X if the approximation point  $P_i$  is not acceptable for the inversion of the point X; and,

(d) repeating steps (b) and (c) until the approximation point is acceptable for the inversion of the point X ; and,

(e) displaying the approximation point on the display screen .

48. (Currently Amended) A system for inverting a point  $X$  on a distorted surface in a detail-in-context presentation, the system having memory, a display, and an input device, the system comprising:

a processor coupled to the memory, display, and input device and adapted for:

(a) locating a first approximation point  $P_i$  for an inversion of the point  $X$ , wherein the point  $P_i$  is on an undistorted surface;

(b) obtaining a point  $P_i^D$  by displacing the point  $P_i$  onto the distorted surface by applying a distortion function  $D$ ; calculating a magnitude of the difference  $|P_i^D - X|$  between the point  $X$  and the point  $P_i^D$ ; and, determining whether the point  $P_i$  is acceptable for the inversion of the point  $X$  by comparing the magnitude of the difference to a tolerance  $\delta$ ;

(c) locating a next approximation point  $P_{i+1}$  for the inversion of the point  $X$  if the approximation point  $P_i$  is not acceptable for the inversion of the point  $X$ ; and,

(d) repeating (b) and (c) until the approximation point is acceptable for the inversion of the point  $X$  ; and,

(e) displaying the approximation point on the display .

49. (Cancelled)



**REMARKS/ARGUMENTS**

Claims 22-49 stand rejected under 35 USC 101 as being directed toward non-statutory subject matter. It is noted that the Examiner has not rejected any claims based on prior art (i.e., for anticipation or obviousness).

With respect to independent Claim 22, on page 2 of the Office Action the Examiner states the following:

“Re: independent claim 22, steps a and b are only location and obtaining a point, and claim 22 does not specify the practical application for mentioned point, however, the preamble of claim 22 disclosed ‘for display on a display screen’. It still does not represent the data on a CRT or LCD or any tangible computer monitor. (see page 23 at first paragraph of Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility, discloses when a claim applies a mathematical formula, e.g., as part of a seemingly patentable process, the examiner must ensure that it does not in reality ‘seek [] patent protection for that formula in the abstract.’”

The Examiner had the same problem with independent Claims 37, 39, 43, and 45-48.

To better define the invention, Claims 22, 37, 39, 43, and 45-48 have each been amended to include a step specifying that the approximation point is displayed on the display screen. These amendments make it explicit within the body of each claim that the approximation point is associated with a physical device (i.e., it is displayed on a display screen).

With respect to independent Claims 41 and 49, on pages 2-3 of the Office Action the Examiner states the following:

“Claims 41 and 49 claimed modulated carrier signal, merely claimed non-functional descriptive material, i.e., a modulated carrier signal does not make it statutory. (see, page 51 at first paragraph of Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility, discloses when nonfunctional descriptive is recorded on some computer-readable medium, in a computer or on an electromagnetic carrier signal, it is not

**APR 13 2007**

statutory since no requisite functionality is present to satisfy the practical application requirement.) Examiner's note: The link to the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility published on the USPTO website on October 26, 2005, is as follows: [http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101\\_20051026.pdf](http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf)

What the Applicant understands the Examiner to be saying here is that signal claims are no longer patentable according to the USPTO's "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" which was posted on the USPTO's website on October 26, 2005 (the "Interim Guidelines"). In particular, please see the "Electro-Magnetic Signals" section on pages 55-57 of the Interim Guidelines. The section concludes with these words on page 57: "These interim guidelines propose that such signal claims are ineligible for patent protection because they do not fall within any of the four statutory classes of s.101. Public comment is sought for further evaluation of this question." The Applicant respectfully submits that these new Interim Guidelines are not law.

Claims 41-42 and 49 have been cancelled. Please note that Claims 41-42 and 49 have been cancelled without prejudice. The Applicant reserves the right to pursue these cancelled claims in a continuing application or otherwise.

No new matter has been entered by the above amendments.

The Applicant believes that Claims 22-40 and 43-49 are patentable.

The Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

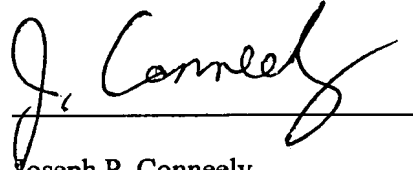
APR 13 2007

Respectfully submitted,

McCarthy Tétrault LLP

Date: July 7, 2006

By

A handwritten signature in black ink, appearing to read "J. Conneely", written over a horizontal line.

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APR 13 2007